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REMARKS***Brief Status of the Application***

In the Office Action, claims 54-61 were rejected. In the present Amendment, claims 54-57, 59 and 60 have been amended. Claims 54-61 are still pending. The amendments to claims 54-57, 59 and 60 and the proposed drawing corrections to FIG. 2A are supported by the specification, drawings and claims and, thus, no new matter is added.

Claim 54 has been amended to recite adjacent tubular portions. Claims 55-57 and 59 have been rewritten in independent form. Claim 60 has been amended to recite a plurality of wires or filaments.

Priority Under 35 U.S.C. § 119

On the Office Action Summary Sheet, it was indicated that no certified copies of the priority documents have been received. The applicants would like to point out that certified copies of the priority documents were filed in priority patent application serial no. 08/312,881. The Examiner is invited to review the file of patent application serial no. 08/312,881 to verify that the certified copies of the priority documents were received.

Objection to the Information Disclosure Statement

In the Office Action, the Information Disclosure Statement (IDS) filed August 3, 2000 was objected to for failing to comply with 37 C.F.R. § 1.98(a)(1). The requested copies of the scientific publications and search report listed on sheet 5 of the IDS filed on July 27, 2000 are being filed herewith for the Examiner's convenience. Also filed herewith is a copy of sheet 5 for the Examiner's indication that the listed references have been considered. The applicants look forward to receiving a copy of sheet 5 indicating that the listed references have been considered.

Accordingly, the applicants respectfully request withdrawal of the objection.

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Objections to the Drawings

In the Office Action, FIG. 2A was objected to. In response, a sheet showing the proposed drawing changes to FIG. 2A, with corrections shown in red ink, is being filed herewith. The Examiner is respectfully requested to indicate approval of the proposed drawing changes in the next Office Action. The applicants respectfully request that formal drawings containing the proposed drawing changes be allowed to be submitted once the application has been indicated to be in condition for allowance.

Also, the drawings were objected to for not showing every feature of the invention specified in the claims; namely, "hoop-like tubular portions", "corrugated portions", "straightened portions", and "generally straight intermediate portions". The applicants believe that the drawings do show these features of the present invention specified in the claims and provide the following as an explanation of their belief.

As shown in the exemplary embodiments illustrated in FIGS. 1A-4A and best shown in FIG. 2A, each of the "hoop-like tubular portions" (one embodiment of which is described in the specification at page 23, line 11 through page 24, line 19, for example, as a "hoop" or "hoops" 20, 20a, 20b, 25) is formed from a "corrugated portion" (one embodiment of which is described in the specification at page 23, lines 18-20, for example, as the part of the wire that "follows a sinuous path to define a plurality of circumferentially spaced apices 22").

The applicants are making the assumption that "straightened portions" as referred to in the Office Action is meant to be directed to "straightened extension portions." As best illustrated by the exemplary embodiment shown in FIGS. 2A, 3 and 4A, a "straightened extension portion" (one embodiment of which is described in the specification as "... the point of winding of the nitinol wire is displaced longitudinally with respect to the axis of mandrel 46 to form the next successive hoop 20b") is the part or portion of the wire that extends from one "hoop-like tubular portion" to the adjacent or neighboring "hoop-like tubular portion" (see page 9, lines 19-24 and page 23, lines 24-27). The "straightened extension portions" can be seen in the embodiments illustrated in FIGS. 2A, 3 and 4A as the parts or portions of the wires that give the appearance of double-lines extending between adjacent "hoop-like tubular portions."

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As shown in FIGS. 1A-4A and 5-7, the "generally straight intermediate portions" are the parts or portions of the wire that connect the apices with one another along a sinuous path. An enlarged copy of FIG. 2A is enclosed with annotations for the Examiner's convenience to point out exemplary embodiments of the "straightened extension portion" and the "generally straight intermediate portion."

Accordingly, the applicants respectfully request withdrawal of the objections.

Rejections Under 35 U.S.C. § 112, First Paragraph

In the Office Action, claims 54-60 were rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The Office Action stated that "hoop-like tubular portions," "corrugated portions," "straightened portions", and "generally straight intermediate portions" were not described in the specification. The applicants believe that the specification, together with the drawings, do describe and show these exemplary features for the reasons set forth previously in connection with the drawings. If the Examiner finds that this explanation is inadequate, the applicants would be appreciative of any specific suggestion to overcome these rejections.

Accordingly, the applicants respectfully request withdrawal of the rejections.

Rejections Under 35 U.S.C. § 102(b)

In the Office Action, claims 54-61 were rejected under 35 U.S.C. § 102(b) as being anticipated by MacGregor (U.S. Patent 4,994,071). Claims 54-57 and 59-61 were rejected under 35 U.S.C. § 102(b) as being anticipated by Maeda et al. (WO 93/13825).

Regarding claims 54-61, the Office Action states that the MacGregor reference discloses the claimed invention. Regarding claims 54-57 and 59-61, the Office Action states that the Maeda et al. reference discloses a stent meeting the general structure and limitations of claims 54-57 and 59-61.

The applicants have amended independent claim 54 to overcome the rejections directed to claim 54 and dependent claim 58, and to distinguish them from the specific

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structure disclosed in the MacGregor reference. Claims 55-57 and 59 have been rewritten in independent form without amendment. Claim 60 has been amended to provide consistency in the terms that are used in the claim. In addition, the applicants offer the following to explain distinguishing features of the present application from the MacGregor and Maeda references.

Claim 54 has been amended to further include the limitation of "wherein at least two of said hoop-like tubular portions are axially arranged generally adjacent to one another." The applicants submit that the rejections directed to claim 54 has been overcome by the amendment to claim 54, which incorporates this further limitation that is neither disclosed nor suggested in the MacGregor reference. (see Figures 1 and 1A of MacGregor, cited by the Examiner, which teach loops 12 separated by at least a loop's axial width).

In addition, the applicants submit that the Maeda reference does not disclose or suggest a plurality of wires or filaments having one or more corrugated portions and that the hoop-like tubular portions are formed from the corrugated portions of two or more of the wires or filaments. The Maeda reference discloses a structure formed from a single wire, and that the hoop-like tubular portions are formed from the corrugated portions of only that wire. (see Abstract; page 5, line 23 to page 6, line 2; Figures 1, 3 and 6).

Dependent claim 58 incorporates the amended limitation of claim 54 by reference and is therefore allowable by virtue of the claim's dependency upon allowable claim 54.

Claim 55 has been rewritten in independent form. The applicants submit that the MacGregor reference does not disclose nor suggest that the corrugations comprise zig-zags having V-shaped apices connected by generally straight intermediate portions. As disclosed in the MacGregor reference, the corrugations comprise zig-zags having U-shaped apices. (see Figures 1 and 1A). To avoid being redundant regarding the Maeda reference, the applicants incorporate the same submission as provided above for claim 54, the original features of which have always been recited in claim 55.

Claim 56 has been rewritten in independent form. The applicants submit that the MacGregor reference does not disclose nor suggest that the straightened extension

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portions are oriented skew, or at an angle, relative to the tube axis. As disclosed in the MacGregor reference, the straightened extension portions are oriented in general alignment relative to the tube axis and "backbones similar to the backbone 28 could also be added to the two lattices 20, 22." (see column 4, lines 17-18; Figures 1 and 1A). To avoid being redundant regarding the Maeda reference, the applicants incorporate the same submission as provided above for claim 54, the original features of which have always been recited in claim 56.

Claim 57 has been rewritten in independent form. The applicants submit that the MacGregor reference does not disclose or suggest adjacent tubular portions since it discloses that each of the hoop-like tubular portions is arranged with a measurable distance between itself and a nearby hoop-like tubular portion. (see Figures 1 and 1A). To avoid being redundant regarding the Maeda reference, the applicants incorporate the same submission as provided above for claim 54, the original features of which have always been recited in claim 57.

Claim 59 has been rewritten in independent form. The applicants submit that the MacGregor reference does not disclose or suggest that the consecutive ones of the hoop-like tubular portions are also connected at a point circumferentially displaced from the straightened extension portions. As disclosed in the MacGregor reference, the consecutive ones of the hoop-like tubular portions appear to be connected at a single point. (see Figures 1 and 1A). To avoid being redundant regarding the Maeda reference, the applicants incorporate the same submission as provided above for claim 54, the original features of which were always recited in claim 59.

Claim 60 has been amended to provide consistency in the terms that are used in the claim; specifically, to recite a plurality of wires or filaments. The applicants submit that the MacGregor reference does not disclose or suggest that the straightened extension portions extend in a helical path between and connect consecutive hoop-like tubular portions of the hoop-like tubular portions. As disclosed in the MacGregor reference, the straightened extension portions are oriented in general alignment relative to the tube axis and "backbones similar to the backbone 28 could also be added to the two lattices 20, 22." (see column 4, lines 17-18; Figures 1 and 1A).

With respect to Maeda, claim 60 recites a plurality of wires or filaments, wherein the hoop-like tubular portions are formed from corrugated portions of two or

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more wires or filaments, and wherein extension portions of the wires or filaments extend in a helical path between and connect consecutive tubular portions. These features are neither disclosed nor suggested by Maeda. In contrast, Maeda teaches a single-wire structure in which a straight helical filament connects adjacent bends of the wire.

Regarding claim 61, the applicants submit that each of the MacGregor and Maeda references does not disclose or suggest that a connecting segment extends along a helical path from a sinuous or zig-zag segment of one of the adjacent hoops to a sinuous or zig-zag segment of the other one of the adjacent hoops. As disclosed in the MacGregor reference, the connecting segments (or straightened extension portions) are oriented in general alignment relative to the tube axis and "backbones similar to the backbone 28 could also be added to the two lattices 20, 22." (see column 4, lines 17-18; Figures 1 and 1A). As disclosed in the Maeda reference, the wire is helically wound about a central axis and, therefore, lacks hoops having apices in a plane substantially perpendicular to the longitudinal axis of the stent, as is recited in claim 61.

Accordingly, the applicants respectfully request withdrawal of the rejections.

Summary

In view of the foregoing amendments and remarks, the applicants submit that this application is in condition for allowance and respectfully request early and favorable notification to that effect. If it would expedite prosecution of this application, the Examiner is invited to confer with the applicants' undersigned attorneys.

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Respectfully Submitted,

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HSN/lal

Dated: April 25, 2002

Enclosures: PTO Form 1449 (Page 5)
Copies of Listed References
Sheet Showing the Proposed Drawing Changes to Figure 2A
-Enlarged Copy of Figure 2A

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VERSION WITH MARKINGS TO SHOW CHANGES MADE**IN THE CLAIMS:**

1 54. (Amended) A generally tubular prosthesis for implantation in a human or
2 animal duct to ensure a passageway in said duct, said prosthesis having a tubular
3 surface and a tube axis and being generally axially subdivided into two or more
4 circumferentially oriented hoop-like tubular portions, said prosthesis comprising:

5 a plurality of discrete structural wires or filaments joined together to form said
6 prosthesis, said wires or filaments each having one or more corrugated portions and at
7 least some of said wires or filaments having one or more generally straightened
8 extension portions[;],

9 wherein at least two of said hoop-like tubular portions are axially arranged
10 generally adjacent to one another,

11 wherein said hoop-like tubular portions are formed from the corrugated portions
12 of two or more of said wires or filaments[;], and

13 wherein said straightened extension portions extend between and connect
14 consecutive ones of said hoop-like tubular portions.

1 55. (Amended) [The prosthesis of claim 54,]A generally tubular prosthesis for
2 implantation in a human or animal duct to ensure a passageway in said duct, said
3 prosthesis having a tubular surface and a tube axis and being generally axially
4 subdivided into two or more circumferentially oriented hoop-like tubular portions, said
5 prosthesis comprising:

6 a plurality of discrete structural wires or filaments joined together to form said
7 prosthesis, said wires or filaments each having one or more corrugated portions and at
8 least some of said wires or filaments having one or more generally straightened
9 extension portions,

10 wherein said hoop-like tubular portions are formed from said corrugated
11 portions of two or more of said wires or filaments,

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12 wherein said straightened extension portions extend between and connect
13 consecutive ones of said hoop-like tubular portions, and

14 wherein said corrugations comprise zig-zags having V-shaped apices connected
15 by generally straight intermediate portions.

1 56. (Amended) [The prosthesis of claim 54,] A generally tubular prosthesis for
2 implantation in a human or animal duct to ensure a passageway in said duct, said
3 prosthesis having a tubular surface and a tube axis and being generally axially
4 subdivided into two or more circumferentially oriented hoop-like tubular portions, said
5 prosthesis comprising:

6 a plurality of discrete structural wires or filaments joined together to form said
7 prosthesis, said wires or filaments each having one or more corrugated portions and at
8 least some of said wires or filaments having one or more generally straightened
9 extension portions,

10 wherein said hoop-like tubular portions are formed from said corrugated
11 portions of two or more of said wires or filaments,

12 wherein said straightened extension portions extend between and connect
13 consecutive ones of said hoop-like tubular portions, and

14 wherein at least some of said straightened extension portions [extending
15 between and connecting consecutive ones of said hoop-like tubular portions] are
16 oriented skew relative to the tubular axis.

1 57. (Amended) [The prosthesis of claim 54,] A generally tubular prosthesis for
2 implantation in a human or animal duct to ensure a passageway in said duct, said
3 prosthesis having a tubular surface and a tube axis and being generally axially
4 subdivided into two or more circumferentially oriented hoop-like tubular portions, said
5 prosthesis comprising:

6 a plurality of discrete structural wires or filaments joined together to form said
7 prosthesis, said wires or filaments each having one or more corrugated portions and at
8 least some of said wires or filaments having one or more generally straightened
9 extension portions,

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10 wherein said tubular portions are arranged generally adjacent to each other,

11 wherein said hoop-like tubular portions are formed from said corrugated
12 portions of two or more of said wires or filaments, and

13 wherein said straightened extension portions extend between and connect
14 consecutive ones of said hoop-like tubular portions.

1 59. (Amended) [The prosthesis of claim 54,] A generally tubular prosthesis for
2 implantation in a human or animal duct to ensure a passageway in said duct, said
3 prosthesis having a tubular surface and a tube axis and being generally axially
4 subdivided into two or more circumferentially oriented hoop-like tubular portions, said
5 prosthesis comprising:

6 a plurality of discrete structural wires or filaments joined together to form said
7 prosthesis, said wires or filaments each having one or more corrugated portions and at
8 least some of said wires or filaments having one or more generally straightened
9 extension portions,

10 wherein said hoop-like tubular portions are formed from said corrugated
11 portions of two or more of said wires or filaments,

12 wherein said straightened extension portions extend between and connect
13 consecutive ones of said hoop-like tubular portions, and

14 wherein consecutive ones of said hoop-like tubular portions are also connected
15 at a point circumferentially displaced from said extension portion.

1 60. (Amended) A generally tubular prosthesis for implantation in a human or
2 animal duct to ensure a passageway in said duct, said prosthesis having a tubular
3 surface and a tube axis and being generally axially subdivided into two or more
4 circumferentially oriented hoop-like tubular portions, said prosthesis comprising:

5 a [wire or filament having] plurality of wires or filaments wherein each of said
6 wires or filaments has one or more corrugated portions and at least one of said wires or
7 filaments has one or more generally straightened extension portions[:],

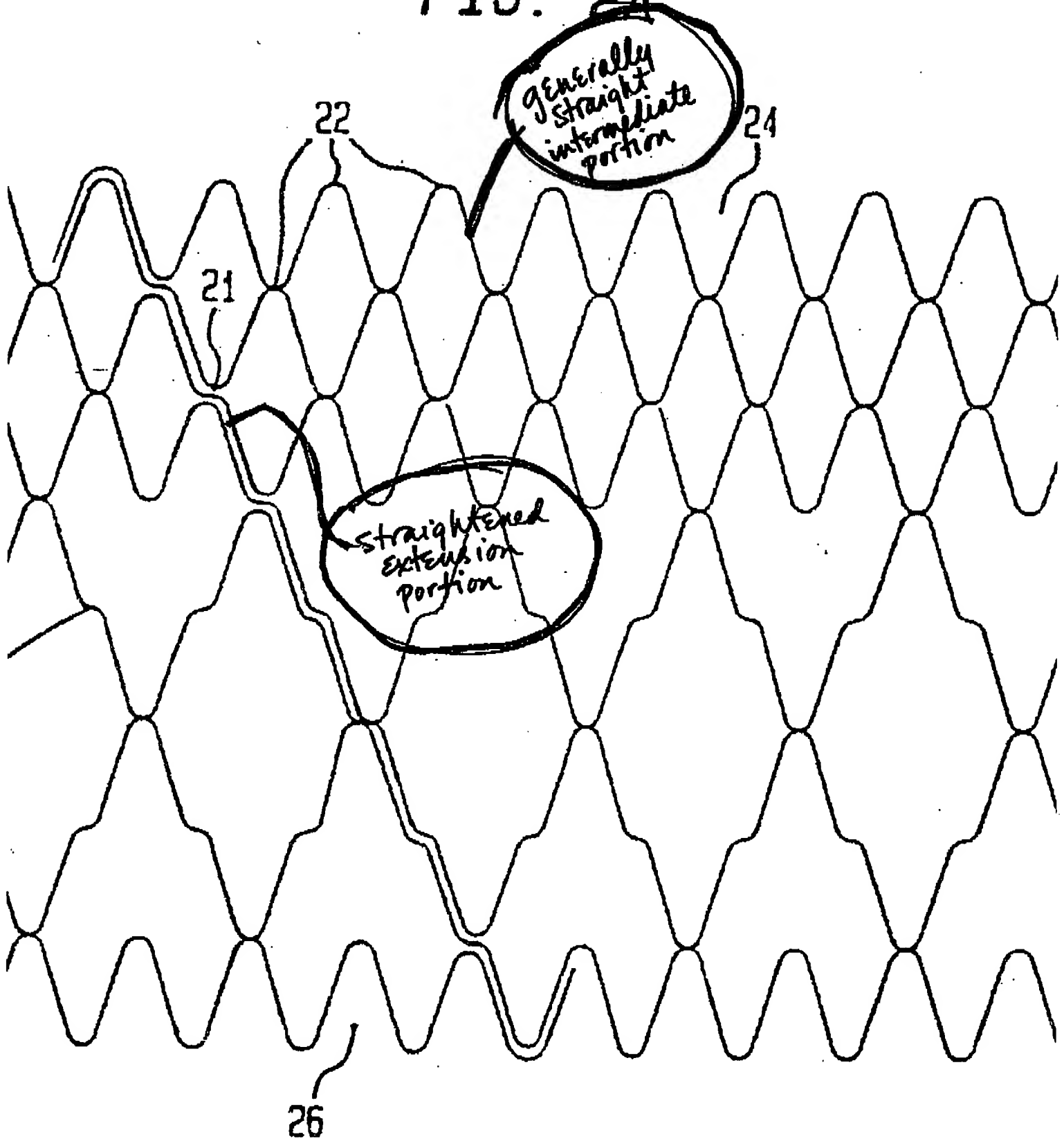
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8 wherein said hoop-like tubular portions are formed from [the]said corrugated
9 portions of two or more of said wires or filaments[;], and

10 wherein said straightened extension portions extend in a helical path between
11 and connect consecutive hoop-like tubular portions.

FIG. 24



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FIG. 2A

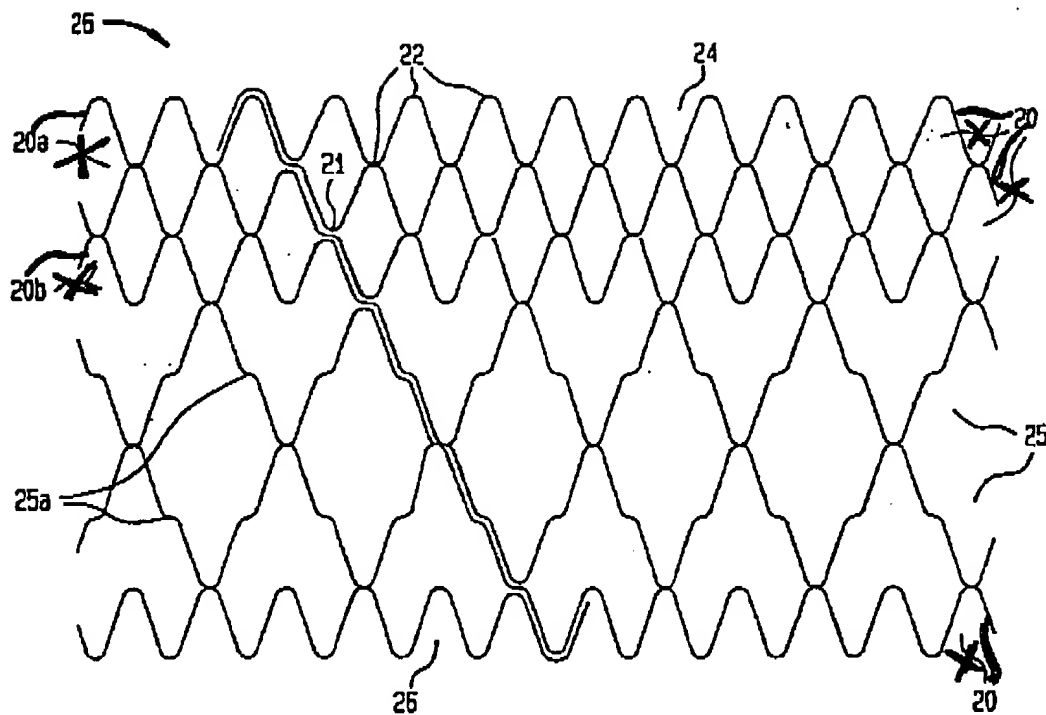


FIG. 2B

